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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,783	09/12/2000	Richard A. Shimkets	15966-577 (CURA-77)	3145

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EXAMINER

JIANG, DONG

ART UNIT

PAPER NUMBER

1646

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/662,783

Applicant(s)

SHIMKETS ET AL.

Examiner

Dong Jiang

Art Unit

1646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,40 and 66-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,40 and 66-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED OFFICE ACTION

Applicant's response filed on 24 October 2003 is acknowledged and entered.

Currently, claims 1, 2, 40 and 66-68 are pending and under consideration.

#### **Rejections Over Prior Art:**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1, 2, 40 and 66-68 remain rejected under 35 U.S.C. 102(e) as being anticipated by Gilbert et al., US 6,495,668 B1, for the reasons of record set forth in the last Office Action, paper No. 15, mailed on 24 June 2003, at pages 2-3.

Applicants argument filed on 24 October 2003 has been fully considered, but is not deemed persuasive for reasons below.

At page 4 of the response, the applicant argues that Gilbert does not teach the specific polypeptides consisting of 239-370 (SEQ ID NO:4), 247-370, 247-338, or 339-370 of applicants SEQ ID NO:2, that Gilbert's growth factor domain starts with residue 246 or 250 based on the potential cleavage sites at 245 and 249, and neither of cleavage sites would give rise to applicants polypeptides that begin at 239, 247 and 339, and that Gilbert states that the taught boundaries can vary  $\pm 5$  residues, and admits they are imprecise, whereas applicant has specific teaching of purified polypeptides having amino acid residues as cited. This argument is not persuasive because, as acknowledged by applicants, Gilbert teaches that those skilled in the art will recognize that domain boundaries are somewhat imprecise and can vary by up to  $\pm 5$  residues from the specified position. As such, the teachings of the prior art encompass polypeptide fragments with the N-terminus starting at any one of the residues 241 to 255, and therefore, anticipate the presently claimed polypeptide fragment having amino acid residues 247-370 of SEQ ID NO:2.

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At page 5 of the response, the applicant argues that it is clear that the limitation "113 to 138 amino acid residues in length and comprises amino acid residues 258-370 of SEQ ID NO:2" in claim 1 of the US patent '668 meant 113 amino acids which is the length of amino acids 258-370 and optionally, up to 25 additional residues including a N-terminal methionine, small linker peptides, affinity tags, and cleavage sites, as indicated in column 14, lines 29-40; that there are only two polypeptides disclosed by Gilbert in which the 25 additional residues could be interpreted as including certain additional residues from SEQ ID NO:2; and that Gilbert does not teach the specific polypeptides as those in the present invention. This argument is not persuasive because, as acknowledged by applicants, there are two polypeptides (246-370 and 250-370 of SEQ ID NO:2) disclosed by Gilbert in which the 25 additional residues could be interpreted as including certain additional residues from SEQ ID NO:2, as such, an addition of 7 amino acids at the N-terminus of 246-370 would generate a fragment identical to SEQ ID NO:4 (239-370) of the present invention, and therefore, anticipates claim 1. Further, there is no indication that the disclosure in '668 patent, column 14, lines 29-40, as pointed by applicants (see above), applies for the fragment of the growth factor domain, or for the interpretation of claims 1, 6, 12 and 13 of the patent because the disclosure in column 14, lines 29-40 of the patent is directed to the polypeptide variations of SEQ ID NO:2 or 53, and it is out of the context of the fragments of the growth factor domain.

**Conclusion:**

No claim is allowed.

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**Advisory Information:**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Dong Jiang whose telephone number is 703-305-1345. The examiner can normally be reached on Monday - Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler, can be reached on (703) 308-6564. The fax phone number for the organization where this application or proceeding is assigned is 703-308-0294.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



**LORRAINE SPECTOR  
PRIMARY EXAMINER**

Dong Jiang, Ph.D.  
Patent Examiner  
AU1646  
1/6/04